

Please amend the specification as follows:

Please replace paragraph [0060] with the following paragraph:

[0001] Typically the functional group of the functionalized porous polymer monolith is capable of binding a nucleic acid. A particularly preferred nucleic acid that is capable of binding expressed genes in a biological sample is oligo-T (i.e., for hybridization of poly-A segments of mRNA). Accordingly, amine-containing oligo-T can be bound to porous polymer monoliths through a monomer that is capable of copolymerizing with the porous polymer monolith and which also includes a functional group capable of forming a covalent bond with oligo-T. Examples of suitable functional groups capable of binding oligo-T include glycidyl, or aldehyde chemistries. Accordingly, suitable monomers include, ethylene glycol dimethacrylate, 2-hydroxyl ethyl methacrylate, tetrahydroxyl furan methacrylate, lauryl acrylate, morpholine acrylate, 2-hydroxy ethyl acrylate, and preferably glycidyl methacrylate ("GMA"). Typically, the functionalized porous polymer monolith includes pores having a surface, the pores permitting fluid communication through the functionalized porous polymer monolith. The functionalized porous polymer monolith also typically includes a highly crosslinked polymer. A variety of crosslinked polymers can be prepared by the methods disclosed in the Shepodd patent, but typically the highly crosslinked polymer includes units derived from at least one mono-ethylenically unsaturated monomer, at least one multi-ethylenically unsaturated monomer, or a combination thereof. Examples of suitable mono-ethylenically unsaturated monomer include any of the mono-ethylenically unsaturated, functionalized or unfunctionalized, acrylic or methacrylic monomers known in the polymer art, such as 2-hydroxyethyl acrylate, 2-hydroxyethyl methacrylate, glycidyl methacrylate and 9-anthracenylmethyl methacrylate. Other suitable mono-ethylenically unsaturated monomers include allylglycidyl ether, 2-vinyl oxirane, and polybutadiene-maleic anhydride. Examples of functional groups include *inter alia* alcohol (e.g., hydroxyethylmethacrylate) and glycidyl (e.g., glycidyl methacrylate). Examples of multi-ethylenically unsaturated monomer include ethylene glycol dimethacrylate ("EGDMA"), polyethyleneglycol dimethacrylate, tetraethyleneglycol dimethacrylate, triethyleneglycol dimethacrylate, ethylene dimethacrylate, 1,3-butanediol dimethacrylate, 1,4-butanediol dimethacrylate, 1,6-hexanediol diacrylate, tripropyleneglycol diacrylate, trimethylolpropane

DOCKET NO.: SNL-0004 (SD-8433)

PATENT

Application No.: 10/701,097

Office Action Dated: January 25, 2006

triacylate ("TMPTA"), trimethylolpropane trimethylacrylate ("TMPTMA"). Typically, the functionalized porous polymer monoliths are prepared by using a suitable UV photo initiator, such as Irgacure™ 1800. A suitable highly crosslinked polymer comprises units derived from a radical reaction catalyzed by UV activation of bis(2,6-D, methoxybenzoyl)-2,4,4-trimethylphenyl phosphine oxide.